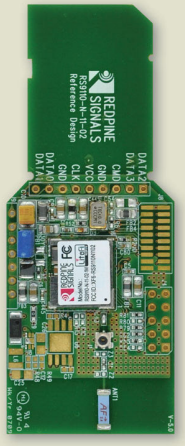
RS9110-N-11-02 EVB

REDPINE SIGNALS®

Expanding Wireless Horizons

RS9110-N-11-02

RS9110-N-11-02 EVALUATION BOARD



The RS9110-N-11-02 evaluation board (EVB) is a complete IEEE 802.11bgn Wireless LAN evaluation platform for the RS9110-N-02 802.11bgn WLAN module. The RS9110-N-11-02 module is mounted on the EVB along with other supporting components including a 40 MHz reference oscillator, antenna and other passive components. The RS9110-N-11-02 is a high-performance, ultra low-power WLAN module providing IEEE 802.11n functionality in the single stream mode in the 2.4 GHz band. The board connects to a host processor through SDIO or SPI interfaces. It also provides the connectivity for the WLAN module to the Vector Signal Generator (VSG) and Vector Signal Analyzer (VSA) through a microwave coaxial connector switch mounted on the EVB. The RS9110-N-11-02 evaluation board facilitates the integration of the module into a host platform and its performance measurement.

Features

- Supports IEEE 802.11bgn operation
- Frequency Band - 2.4GHz
- Operating channels:
  - USA – Channels 1 to 11
  - Japan – Channels 1 to 14
  - Europe – Channels 1 to 13
- Integrated omni directional chip antenna
- 40 MHz, 20-ppm reference oscillator
- Connectors for power measurement
- Microwave coaxial connector switch
- Support for SDIO and SPI host interfaces
- Supply voltage of 3.0V to 3.6V
- It can be powered through SDIO or SPI interface, or through external power supply
- 802.11n drivers and configuration tools for Windows XP, Linux and Windows CE platforms

Purpose

- Integration of RS9110-N-11-02 into various host platforms
- IEEE 802.11bgn PHY performance measurement
- Interoperability verification

Specifications

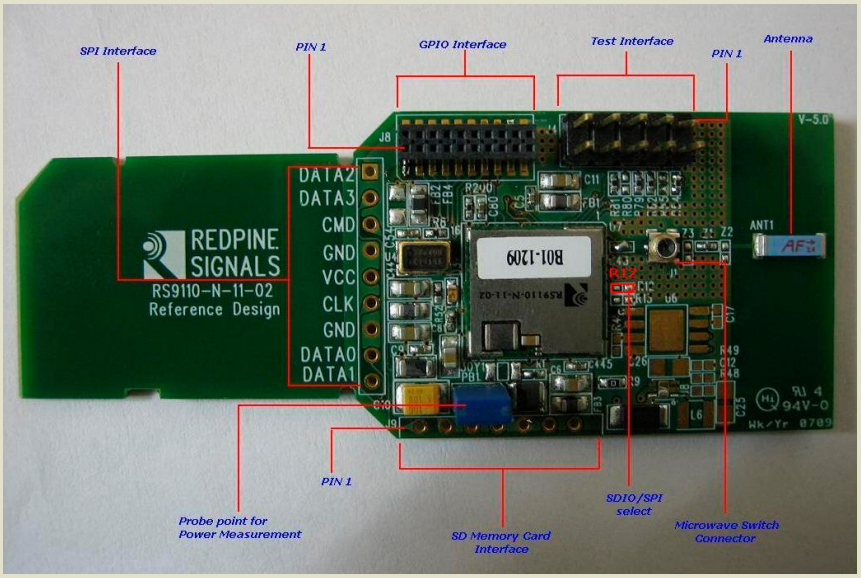
Network Standard Support	IEEE 802.11b/g/d/e/i and draft 802.11 n/k
Data Rates	802.11n: 6.5, 13, 19.5, 26, 39, 52, 58.5, 65 Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11b: 1, 2, 5.5, 11 Mbps
Frequency Band	2.412 - 2.484 GHz
Modulation Techniques	OFDM with BPSK, QPSK, 16-QAM, and 64-QAM 802.11b with CCK and DSSS
QoS	WMM and WMM Power Save Support
Wireless Security	802.11i: AES, TKIP, WEP, WPA, and WPA2 WPS – PIN and Push button
802.11n Features	MCS 0-7, STBC, RIFS,Greenfield Protection, A-MPDU, A-MSDU Aggregation with Block-ack, PSMP, MTBA
Host Interfaces	SDIO v1.2/2.0, SPI
Other Interfaces	I2C, SPI, GPIO, UART
Clocks	Reference Input: 9.6,13,19.2,26,38.4,40,52MHz Optional RTC: 32KHz crystal or direct 32KHz clock input
Package Size	13.7 mm x 12.9 mm x 1.6 mm
Supply Voltage	3 – 3.6 V
Operating Temperature	-40ºC to +85ºC
Certification	802.11n Draft 2.0, WPA, WPA2, WMM,WMM Power-save, WPS, Voice-Personal

Software Package

The evaluation kit for RS9110-N-11-02 comes with everything needed for verification of IEEE 802.11n functionality on any of SDIO or SPI based Linux, Windows XP and Windows CE platforms. A CD is provided along with the evaluation kit, containing the following items.

- 802.11n WLAN driver for Windows XP, Linux, Windows CE and Windows Mobile.
- 802.11 configuration utility
- Driver installation guide
- Wi-Fi™ evaluation procedure manual
- RS9110-N-11-02 Product Brochure
- RS9110-N-11-02 Datasheet

RS9110-N-11-02 EVB PICTURE



For additional information, please contact Sales at Redpine Signals, Inc.:
Redpine Signals, Inc. • 2107 North First Street • Suite 680 • San Jose, CA 95131
Phone: +1 408 748 3385 • Email: sales@redpinesignals.com

www.redpinesignals.com

Lite-Fi™ REDPINE
Ultra Low Power Wi-Fi™